Claims:

1. (Previously Presented) A system for real-time vulnerability assessment of a host/device, said system comprising:

an agent running on the host/device, said agent comprising:

an executable agent module configured to track the status of interfaces and ports on the interfaces of the host/device and to store the information as information entries,

said executable agent module configured to compare the entries to determine a change in the status of interfaces and/or of ports on the interfaces of the host/device,

a remote destination server comprising:

an executable server module configured to receive the information entries communicated by the executable agent module,

said executable server module configured to store the received information entries, wherein the information entries indicate the state of each of the ports on each of the active interfaces of the host/device,

said executable server module configured to compare the received information entries to determine the change in the status of interfaces and ports on the interfaces of the host/device, and

said executable server module configured to run vulnerability assessment tests on the host/device in the event of a change in the status of interface/ports.

2. (Previously Presented) The system of claim 1 wherein said executable server module is configured to receive and update the vulnerability data in a vulnerability database whenever new vulnerabilities are discovered, and wherein said executable server module is configured to test the host/device for the new vulnerabilities whenever the vulnerability database is updated with new vulnerabilities, and to determine the new vulnerabilities

3. (Withdrawn)

4. (Withdrawn)

5. (Currently Amended) The system of claims 1 ~~and 4~~, wherein status of an interface is either active or inactive.

6. (Currently Amended) The system of claims ~~1 and 4~~, wherein status of a port is a service listening on the port or not.

7. (Currently Amended) The system of claims ~~1 and 4~~, wherein the agent tracks the change in status of ports/interface by monitoring in real-time or polling at periodic intervals for the status of ports/interfaces and storing the entries at various time intervals.

8. (Currently Amended) The system of claims ~~1 and 4~~, wherein the communication protocol between the host/device and the destination server is a standard transport level utility selected from sockets or any other standard communication protocol.

9. (Currently Amended) The system of claims 1 ~~and 4~~, wherein the server executable module compares the entries corresponding two consecutive time intervals.

10. (Currently Amended) The system of claims 1 ~~and 4~~, wherein the host/device is selected from a switch, a router, a device running a standard real-time operating system, a mobile device or a PDA.

11. (Currently Amended) The system of claims 1 ~~and 4~~, wherein the host/device is an

enterprise/consumer machine running with Windows, Unix, Linux, VxWorks, Symbian or PalmOS.

12. (Currently Amended) The system of claims 1 ~~and 4~~, wherein the changes that are communicated to the destination server consisting of the IP address of the interface(s) and the port numbers on which listening services have started or stopped on the particular interface(s).

13. (Currently Amended) The system of claims 1 ~~and 4~~, wherein the status of the port consists of separate statuses for TC and UD protocols.

14. (Currently Amended) The system of claims 1 ~~and 4~~, wherein plurality of hosts/devices is tracked in conjunction with one or more destination servers handling the host/devices.

15. (Currently Amended) Logic encoded in a program stored in a computer readable storage media for real-time vulnerability assessment of a host/device, and operable to perform the following steps:

tracking in real-time the status of interfaces and/or of the ports on a host/device,

communicating a change in the status of the interfaces and/or the status of ports of the host/device to a remotely located destination server on the network,

tracking in real-time the reported status of ports and interfaces of the host/device by the destination server, and

conducting vulnerability assessment tests on the host/device by the destination server in the event of a change in the status of interfaces and/or ports of the host/device.

16. (Withdrawn)

17. (Currently Amended) The logic of claims 15 ~~and 16~~, wherein the status of an interface is either active or inactive.

18. (Currently Amended) The logic of claims 15 ~~and 16~~, wherein status of a port is a service listening on the port or not.

19. (Currently Amended) The logic of claims 15 ~~and 16~~, wherein the status of the port consists of separate statuses for TC and UD protocols.

20. (Currently Amended) The logic of claims 15 ~~and 16~~, wherein tracking consists of monitoring in real-time or polling at periodic intervals for the status of ports/interfaces on the host/device.

21. (Currently Amended) The logic of claims 15 ~~and 16~~, wherein the communication protocol between the host/device and the destination server is a standard transport level utility selected from sockets or any other standard communication protocol.

22. (Currently Amended) The logic of claims 15 ~~and 16~~, wherein the host/device is selected from a switch, a router, a device running a standard real-time operating system, a mobile device or a PDA.

23. (Currently Amended) The logic of claims 15 ~~and 16~~, wherein the host/device is an enterprise/consumer machine running with Windows, Unix, Linux, VxWorks Symbian or PalmOS.

24. (Currently Amended) The logic of claims 15 ~~and 16~~, wherein the changes that are communicated to the destination server consisting of the IP address of the interface(s) and the port numbers on which listening services have started or stopped on the particular interface(s).

25. (Currently Amended) The logic of claims 15 ~~and 16~~, wherein the information that is communicated from the host/device to the destination server is the names of the services.

26. (Currently Amended) The logic of claims 15 ~~and 16~~, wherein the information that is communicated from the host/device to the destination server is a message signaling a change in the status of interfaces and/or ports on the host/device.

27. (Currently Amended) The logic of claims 15 ~~and 16~~, wherein the vulnerability assessment server used by the destination server is updated with the new vulnerabilities to test the presence of vulnerabilities.

28. (Currently Amended) The logic of claims 15 ~~and 16~~, wherein a plurality of hosts/devices are tracked in conjunction with plurality of destination servers handling the host/devices.

29. (Currently Amended) A computer-implemented method for real-time vulnerability assessment of a host/device, said method comprising:

tracking in real-time the status of interfaces and ports on the host/device;

collecting and storing the status as information entries;

comparing the entries to determine any change in the status of interfaces and/or the status of ports on the interfaces of the host/device;

communicating the changes to a remotely located destination server on the network;

storing said changes as entries in the destination server wherein the entries indicate the state of each of the ports on each of the active interfaces of the host/device as reported;

comparing the entries stored at the destination server to determine if there is any change in the status of interfaces and ports on the interfaces of the host/device as reported to it; and

running vulnerability assessment tests on the host/device by the destination server and reporting the results.

30. (Withdrawn)

31. (Currently Amended) The method of claims 29 ~~and 30~~, wherein the status of an interface is either active or inactive.

32. (Currently Amended) The method of claim 29 ~~and 30~~, wherein the status of a port is a service listening on the port or not.

33. (Currently Amended) The method of claim 29 ~~and 30~~, wherein the agent tracks the change in status of ports/interface by monitoring in real-time or polling at periodic intervals for the status of ports/interfaces and storing the entries at various time intervals.

34. (Currently Amended) The method of claim 29 ~~and 30~~, wherein the communication protocol between the host/device and the destination server is a standard transport level utility selected from sockets or any other standard communication protocol.

35. (Currently Amended) The method of claim 29 ~~and 30~~, wherein the server executable

module compares the entries corresponding two consecutive time intervals.

36. (Currently Amended) The method of claim 29 ~~and 30~~, wherein the changes that are communicated to the destination server consisting of the IP address of the interface(s) and the port numbers on which listening services have started or stopped on the particular interface(s).

37. (Currently Amended) The method of claim 29 ~~and 30~~, wherein the status of the port consists of separate statuses for TC and UD protocols.

38. (Currently Amended) The method of claim 29 ~~and 30~~, wherein plurality of hosts/devices is tracked in conjunction with one or more destination servers handling the host/devices.